Foreword

Growth of technology is too rapid in all direction now days and that growth increases the datasets too in huge, that huge collection of datasets is known as Big data. Big data's are huge in size and complex to handle by commonly used data processing tools and applications. These datasets are unstructured and often come from various sources such as social media, social sensors, scientific applications, archives, web documents, electronic health records, business applications, web logs etc. They are larger in size with fast data in/out. Further, big data should have high value and ensure trust for decision making. Also, these data come from heterogeneous sources and heterogeneity is another important property besides variety, volume, velocity, value and veracity.

Currently there are several available technologies which can support handling big data including parallel processing, distributed computing, cloud computing platforms, large storage systems and MapReduce. Based on current estimation by International Data Corporation (IDC) related to the global data is that approximately close to 50% of data is handled through Cloud Computing. Further, cloud computing supports massive storage and computation facility to support big data processing. Therefore, there is an urgent need to investigate the challenges of big data computing by leveraging the potential of cloud computing. This book focuses that how to will address the challenges of both big data and cloud computing.

This book provides window to academic and industrial communities with recent advances in development, application and impact of new big-data platforms and technologies for exploiting floods of big data sources. In addition this book encourages more research in big data and cloud computing technologies.

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